

Digital Screen Solutions

Bring Vision AI to Every Screen

- / AI Digital Screen Platform
- / Indoor & Outdoor Systems
- / Remote Management
- / Application Solutions



Acronis **AMD** android **chromeOS** intel **NVIDIA** **NXP** Qualcomm **Trellix** Ubuntu **Windows** **yocto**
PROJECT

ADVANTECH

Enabling an Intelligent Planet

www.advantech.com

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AI Powered Digital Screen Solutions

Advantech delivers an end-to-end, AI-powered digital screen solution, integrating DS Series hardware with a complete software and management stack. The DS-1/3/4/5/6 lineup spans multiple performance tiers, form factors, and I/O options, enabling deployments from compact signage endpoints to high-performance, multi-display systems. Building on this hardware foundation, Advantech provides signage and operations software (SignageCMS, MviseSuite), vision AI enablement tools (VisionSense Edge Manager/Trainer, FaceMatch), and platform services for device management and AI development (DeviceOn, EdgeAI SDK), supported by broad OS/ BSP compatibility. Together, these elements streamline integration, shorten time-to-deployment, and simplify lifecycle operations across applications including smart retail, transportation, smart city, KDS, and enterprise communications, bringing Vision AI to every screen.



Domain Solution					
System Integration					
Software APIs & SDKs					
OS/BSP					
DS Solution					
	DS-0 series	DS-2 series	DS-3 series	DS-4 series	DS-5 series

The Complete Value-added Features

Advantech DS Series combines deployment-ready hardware design with enterprise-grade software capabilities to deliver a complete set of value-added features for digital signage. On the hardware side, slim/compact and fanless design options support space-constrained installations, while built-in functions such as hardware EDID ensure stable display identification, HDMI-CEC enables automated screen control, and USB Type-C touch monitor support

DOOH

Work Space

Hardware

- Slim and Compact Design
- Fanless and Low Noise Fan options
- Hardware EDID Support
- IR Remote Functionality
- Mounting kit
- USB Type-C Touch Monitor support



simplifies one-cable connectivity. On the software side, DS platforms are prepared for large-scale operations with out-of-band management, display monitoring and remote control, open device APIs for customized management, and strengthened protection aligned with security standards (e.g., IEC 62443), reducing integration effort, minimizing on-site service, and improving 24/7 reliability.

Retail



PIS



Software

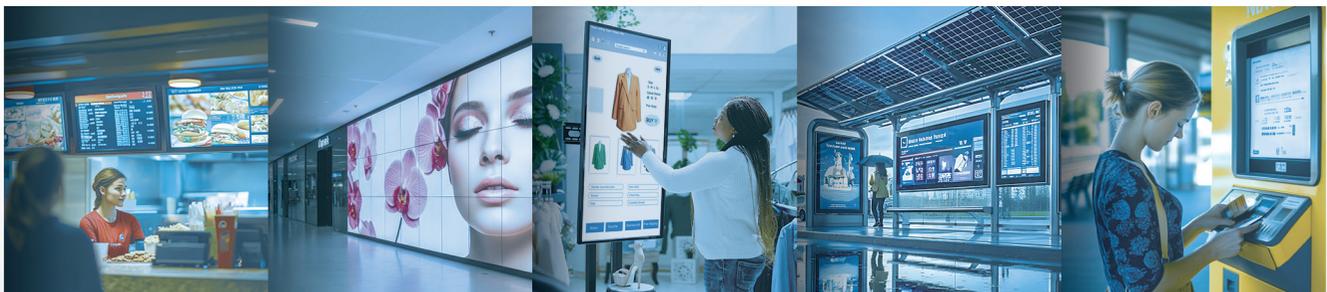
- Intel iAMT Integration
- Out-of-Band Management
- Display Monitoring & Control
- Device API & Customization
- Security IEC62443 Certification



Indoor vs Outdoor

Reliable Solutions for Every Environment

Feature	Indoor	Outdoor
Temperature range	0 ~ 40°C	-20 ~ 60°C
Design Priorities	Sleek appearance, lightweight structure, flexible installation	Rugged design, wide temperature tolerance, waterproof, sunlight-readable
Thermal Management	Basic ventilation or standard fan cooling	Fanless design with advanced heat dissipation
Network / Maintenance	CMS scheduling, EDID policy recommended	OOB remote support to reduce onsite maintenance
Protection Level	Basic indoor-grade protection	IP-rated waterproof, dustproof, vandal-resistant
Typical Use Cases	Promotions, interactive wayfinding, meeting room displays	Traffic information displays, outdoor advertising, smart city solutions



Hardware Architecture

Power Your Display System with Stable Performance and Easy Content Control

Tier	Performance	Display Output	Key Features	Use Case
Entry	Low-power, basic playback	1-2 x HDMI 4K@30/60	Compact, energy-efficient, fanless	Retail, Self Kiosk, Workspace
Mainstream	Stable dual 4K output	2-4 x HDMI 4K@60	Dual display, fanless & reliable, flexible I/O & CMS ready	PIS, DooH, Retail
High-Performance	High performance, AI-ready	3-4 HDMI 4K@60, up to 8K@60	Built-in NPU/GPU for AI analytics	Video Wall

Compact

DS-4 Series

- Compact design
- Low-power Fanless thermal solution

Ultra Slim

DS-0 Series

- HDMI 2.0 x 4
- Slim design, only 19mm thick

Outdoor

DS-3 Series

- Wide range power input
- Fanless thermal solution, -20~60 °C

Modular

DS-2 Series

- Slim & compact design
- Plug and Play, Easy Integration

Multi-Display

DS-6 Series

- Convenient expansion design
- Built-in Signage CMS & DeviceOn

Hardware Highlight: Advantech Edge iBMC

iBMC Reduces System Downtime



On-boarding

Register numerous devices, then organize them into groups or according to hierarchy.



Monitoring

Monitor device status in real-time via a visualized dashboard and receive notifications during abnormal events.



Control

Remotely resolve errors and configure device settings – including power, watchdog timer, and USB lockdown.



Over-the-air

Send device updates over-the-air on firmware, drivers, or software.



iBMC Edge Management

Allowing power management tasks (power on/off, force shutdown, and system reboot) remotely.



Multiple Deployments

DeviceOn is highly compatible with multiple private and public clouds, and on-premise deployment.



Alert

Automated alerts and real-time actions based on device data and predictive analytics.



Dashboard

Quickly build visualization panels with no code for your IoT device telemetry data and KPIs.

Standard TCP/IP for network connectivity



Hardware Highlight: Unique Hardware EDID Function

Smart EDID : Latch and Re-connect



Eyefinity 2x2
(Normal Display)



1 Display Loss / Defect
Windows display No Reset



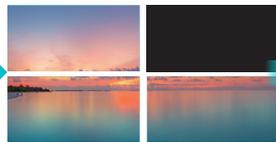
Re-connection of monitor
Displays return to normal



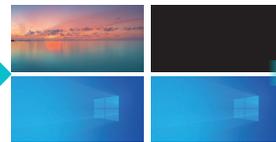
Signal Loss and Windows Re-config



Eyefinity 2x2
(Normal Display)



1 Display Loss / Defect



Windows Configuration
Reset to screen different



After re-connection requires
Windows re-configuration

- **Wrong resolution or aspect ratio**

- **Manual configuration required**

- **Risk of no signal or black screen**

EDID Function

EDID (Extended Display Identification Data) ensures proper communication between the display and media player.

- **Auto Resolution & Format**

The display shares supported resolution, refresh rate, and color format to avoid mismatch issues.

- **Plug & Play**

Devices automatically adjust to optimal settings, reducing manual setup.

- **Stable Output**

Prevents no-signal or black screen problems; EDID emulation keeps the connection reliable.

DS Add-On Features – HDMI-CEC

HDMI CEC Enables Seamless Display Interaction

HDMI CEC



- One Touch Play**

When the PC wakes up, the monitor automatically powers on and switches to the correct HDMI input.

- System Standby**

When the PC enters sleep mode or powers off, the monitor automatically enters standby mode. When the monitor is powered off, the PC may enter sleep mode.

- Power Synchronization**

Synchronizes power status between the PC and monitor through standard CEC power control. PC ON → Monitor ON
PC OFF / Sleep → Monitor OFF

- Remote Control Pass-through (by project)**

Allows the monitor's remote control to operate PC media functions such as play/pause and volume control.

- Device Name Display (by project)**

Playback functions such as play, pause, stop, fast forward, and rewind can be controlled remotely

Advantage

- One-touch display & media player control
- Energy-saving automatic standby
- No extra control box or RS-232 required
- Enhanced user experience: store staff do not need to use a remote or perform manual selection

DS Add-On Features - OOB

Advantech x Allxon – OOB Module Ajax (Optional)

Cloud Serial Console

- Reduce Project Downtime**

Viewing boot messages, kernel logs and system errors

- Enhance Project Security**

Direct access to system's bootloader, no need for SSH server

- Enhance Management Efficiency**

Remotely performing routine maintenance task

- Features**



Power Switch



Force Shutdown

• Integration with the Ajax module will default to the cloud-based software plan :

Package	Annual Fee (USD)	MOQ	Main Features
Essential	\$36 (Unit/Y)	10+ units	Basic OOB control features (e.g., remote reboot)
Growth	\$72 (Unit/Y)	10+ units	OOB functionality + remote device management + OTA updates
Premium	\$72 (Unit/Y)	100+ units	Includes API access, group management, and integration.

- A software license is required for full access.
- This license must be obtained through purchase.



Ajax

OOB Remote Edge AI Device Mgmt. **On Module**



DOOH DS-3 Series

DS-380



Outdoor Fanless Intellegent PC

- Intel® Core™ Ultra 5 & Ultra 7 Series 1 135H, up to 48GB DDR5
- 4x HDMI
- 2x 2.5GbE, 2x USB 3.2 Gen1, 2x USB 2.0, Audio, IR Phone Jack
- M.2 2242 M key, M.2 2230 E key
- -10 ~ 50°C, 19 VDC, 180x177x38 mm, 2 kg (4.4 lb)

DS-330



Book-sized Fanless Outdoor System

- Intel Atom® x7000 series, Processor N series, Core™ i3 N305, up to 16GB DDR5
- 2x HDMI, USB-C
- 2x 2.5GbE, 4x USB 3.2 Gen1, USB-C, Audio, RJ12, 2x RS-232
- M.2 2242 M key, M.2 2230 E key
- -20 ~ 60°C, 12-24 VDC, 180x150x35 mm, 1.27 kg (2.8 lb)

EdgeMount System: DS-5 series

DS-540



VESA Through-Hole PC Designed for Kitchen Display Systems

- Intel® Processor N150, up to 16GB DDR5
- 1 x HDMI 2.1 TMDS, 1 x VGA, 1 x USB-C
- 1 x RJ45, 4 x USB 3.2 Gen1, 1 x USB-C, 2 x RS-232, Audio
- M.2 2242 M key, M.2 2230 E key
- 0 ~ 50°C, 12-24 VDC, 180 x 150 x 35mm, 1kg (2.2lb)

Ultra Slim DS-0 Series

DS-086



8K Ultra-slim Digital Signage Player

- Intel® Core™ Ultra 5 & Ultra 7, up to 48GB DDR5
- 4x HDMI 2.1 8K60/4K60 Ports Support for TV Wall
- RS232, 2x USB 3.2 Gen1, 2x USB 2.0, 2x RJ45
- M.2 2242 M Key, M.2 2230 E Key
- 0 ~ 40°C, 19V DC-in, 180x177x22 mm, 0.9kg (1.98 lb)

DS-084



Ultra-slim 4K Digital Signage Player

- AMD Ryzen™ Embedded R2000 Series, up to 32GB DDR4
- 4x HDMI
- 2x RJ-45, 2x USB 2.0, 2x USB 3.2 Gen1, RS-232, IR, Audio
- M.2 2242 M Key SATA
- 0 ~ 40°C, 19V 3.42A DC-in, 180 x 177 x 23 mm, 0.9kg (1.98 lb)

DS-054



AMD Ryzen™ Embedded 8000 Series Performance Edge Computer

- AMD Ryzen™ 5 PRO 8640U / Ryzen™ 7 PRO 8840U, up to 96GB DDR5
- 4x HDMI, RS-232
- USB 3.2 Gen1, 2x USB2, USB-C
- 2x M.2 2230
- 0 ~ 40°C, 12~ 24 VDC, 180x177x29.9 mm, 0.9kg (1.98 lb)

DS-015



NVIDIA® Jetson Orin™ Nano / NX Compact AI Player

- NVIDIA® Jetson Orin™ Nano/NX, up to 16GB LPDDR5
- HDMI 1.4
- 2x RJ45, 3x USB 3.2 Gen1, USB-C, 2 x RS-232, 2x GMSL, Audio
- M.2 2280 128G, M.2 2230, M.2 2242
- 0 ~ 40°C, 12-24V DC-in, 180x177x29.9 mm, 0.9kg (1.98 lb)

DS-011



Qualcomm® QCS649 Edge-AI Box

- Qualcomm® QCS6490, up to 8GB LPDDR5
- 2x HDMI 2.1 TMDS
- 2x RJ45, 2x USB 3.2 Gen1, 2x RS232, 2x GMSL, Audio
- M.2 2280 M Key, M.2 3042 B Key, M.2 2230 E Key
- 0 ~ 40°C, 12-24V DC-in, 180x177x23 mm, 0.9kg (1.98 lb)

Modular DS-2 Series

DS-230



Smart Display Module

- Intel® 13th Generation Core™ Processor, up to 32GB
- HDMI 2.0 & DP1.4a from golden finger, DP1.4a, M.2 2242/2230
- 2x 2.5GbE, 2 x USB3.2 Gen2
- M.2 2242 M key, M.2 2230 E key
- 0 ~ 55°C, 12 VDC, 175 x 100 x 20 mm, 1kg (2.2 lb)

Mini PC DS-4 Series

DS-410



Atom® J6412 Palm-sized Mini PC

- Stylish Aluminum Die-cast Design with Intel Atom® J6412 processor
- Optimized GFX performance by on board 4GB/8GB DDR4 (3777Mhz)
- Support HDMI 2.0 up to 4K(3840 x 2160), and VGA up to Full HD
- Dual USB 3.0, Dual x Gb LAN, Dual x RS232 via RJ11 ports.
- Support Windows 11 IoT Enterprise LTSC

DS-450



Intel Atom® J6412 Palm-sized Player

- Stylish Aluminum Die-cast Design with Intel Atom® J6412 processor
- Optimized GFX performance by on board 4GB/8GB DDR4 (3777Mhz)
- Support 2 x HDMI up to 4K(3840 x 2160), 6 x USB, 2 x Gb LAN
- 2 x COM, Power on/off, Phoenix connector for device connection via DB9 ports.
- Small system with PWM fan control for silent and smooth fan speed
- Support Windows 11 IoT Enterprise LTSC

DS for DooH (Digital-out-of-Home) and AI-p

AI Ready DS Edge Computing to Connect the Future

DS-330

- Outdoor fanless, compact design, -20~60 °C
- Triple displays output, rich I/Os
- Software solutions for seamless integration



Outdoor Signa

Drive-Thru



DS-011、DS-015

- Edge AI: DS-011 (QCS6490) / DS-015(Jetson Orin Nano/NX)
- Multi-camera ready: GMSL/IP/USB
- Kiosk-grade: slim, dual 4K, rich I/O



DS-

- Hig
- Ultr
- Sup

Powered Multi-Displays

age



DS-380

- Core Ultra 5: Fanless, Outdoor-ready with AI visuals
- 8K + 3x4K outputs for ads and interaction
- Supports SignageCMS & iVisionsuite for synced content



Wall Mount

VESA Mount



DS-540

- IP50 Protection – Strong Shield, Against Dust and Debris
- Built for 24/7 use with fanless cooling versatile I/O
- Mounting optimized for seamless KDS installation



DS-086

High Performance 8K or 4x4K
Ultra-slim, 24/7 reliable, Pro I/O
Support Edge AI and Interactive application



DS-084

- High value 4x4K signage player
- Ultra-slim, 24/7 reliable, Pro I/O
- Support out of Band and EDID



Kitchen Display Systems & QSR



Key Roles of KDS:

- **Improves Kitchen Efficiency**
Displays orders in real time and optimizes cooking sequences.
- **Reduces Errors and Missed Orders**
Replaces paper and voice communication with clear digital workflows.
- **Supports Peak-Hour Operations**
Helps kitchens manage high order volumes smoothly.



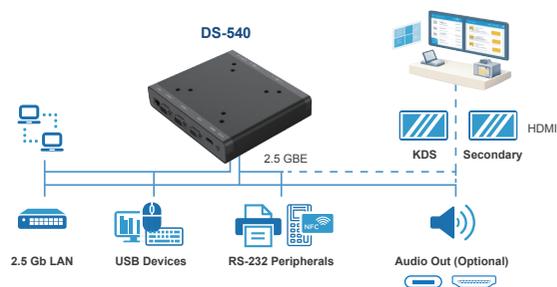
Related Products



DS-540
Edge Mount System

intel. Windows Ubuntu chromeOS Trellix Acronis

Enhancing Kitchen Operations with KDS



DOOH-Digital Out-of-Home



Key Roles of Drive-thru Menu Boards:

- **Enhances Visual Engagement**
Delivers 4K/8K content across multiple screens for clear, dynamic menu presentation.
- **Enables Real-Time Promotions**
Adapts content based on time, weather, and POS data for targeted selling.
- **Supports Indoor & Outdoor Reliability**
Operates fanlessly in hot or humid conditions with rugged, compact design.



Related Products



DS-330
Fanless System for Outdoor Menu Boards



DS-380
High-Performance Engine for outdoor signage

intel CORE ULTRA intel CORE i5 intel ATOM intel. Windows Ubuntu

Drive-thru Signage, Stronger Sales



DOOH-Digital Out-of-Home



Key Roles of Self-Service Kiosks:

- **Delivers Always-On Convenience**
Powers ticketing, check-in, ordering, and payment with 24/7 reliability.
- **Integrates Diverse Peripherals**
Connects screens, printers, scanners, and payment devices through rich I/O.
- **Simplifies Remote Management**
Enables firmware updates and system recovery even when the OS is offline.

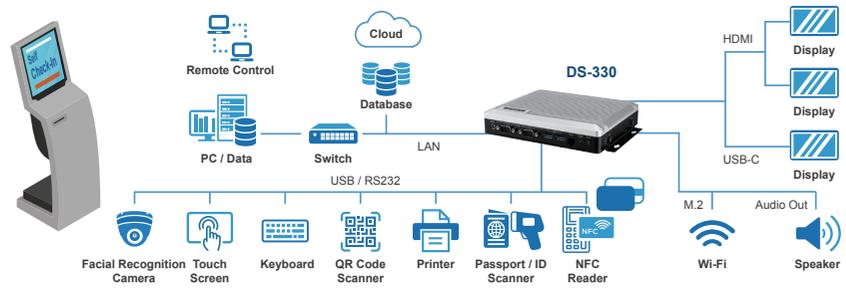
Related Products



DS-330
Compact Fanless System
for Smart Kiosks



Smarter Kiosks, Seamless Service



Digital Menu



Key Aspects of Digital Menu Boards:

- Enhances customer engagement with dynamic content.
- Reduces wait times by displaying relevant information.
- Enables real-time content updates for flexibility.
- Improves decision-making with clear, interactive displays.
- Increases operational efficiency and reduces costs.
- Supports multi-screen setups for larger displays. Provides energy-efficient, high-quality visual experiences.

Related Products



DS-085
Powerful, 4K digital
signage player.



DS-086
High-performance player
for dynamic displays.

Digital Menu Board Solution



DS for Transportation

AI Powered DS



DS-084

- High value 4x4K signage player
- Ultra-slim, 24/7 reliable, Pro I/O
- Support out of Band and EDID

Outdoor + High Resolution



DS-380

- Core Ultra 5: Fanless, Outdoor-ready with AI visuals
- 8K + 3x4K outputs for ads and interaction
- Supports SignageCMS & iVisionsuite for synced content



Outdoor Display



DS-330

- Outdoor fanless, compact design, -20~60 °C
- Triple displays output, rich I/Os
- Software solutions for seamless integration



Arm Low Power Consumption

DS-011、DS-015

- Edge AI: DS-011 (QCS6490) / DS-015 (Orin)
- Multi-camera ready: GMSL/IP/USB
- Kiosk-grade: slim, dual 4K, rich I/O



DS-230

- Intel SDM -L design, -0~55 °C
- Triple independent displays output, rich I/Os
- Supports DeviceOn / SignageCMS



High Resolution



DS-086

- High Performance 8K or 4x4K
- Ultra-slim, 24/7 reliable, Pro I/O
- Support Edge AI and Interactive application



DOOH-Digital Out-of-Home



Key Roles of Railway Station Systems:

- **Streamlines Passenger Processing**
Powers automated ticketing, gates, and check-in systems to enhance flow and convenience.
- **Ensures System Uptime**
Operates 24/7 with fanless, rugged design for high-traffic, harsh environments.
- **Enables Centralized Control**
Supports real-time data sync and remote diagnostics via Out-of-Band management.

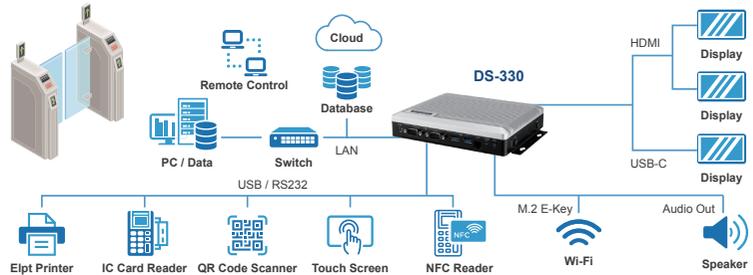
Related Products



DS-330
Rugged Fanless System
for Transit



Optimizing the Transit Experience



Corporate, Workspace, & Industrial Applications



Key Roles of Exhibitions with ProAV:

- **Premium Visual Performance**
Supports 8K output across multiple screens, delivering sharp, eye-catching visuals with professional-grade brightness and color accuracy.
- **Reliable & Scalable Deployment**
24/7 operation with robust design, easily scaling from single displays to large video walls.
- **Centralized Control**
Simplified management and maintenance across systems.

Related Products

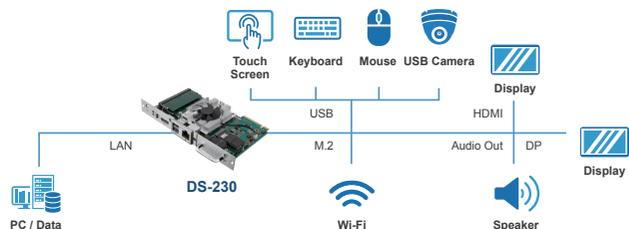


DS-202
Smart display for seamless
collaboration



DS-230
Enhanced digital signage
for versatile displays

Immersive Exhibition Experiences, Made Simple



Smart Transportation Display Solution



Key Roles of Smart Transportation Display Solution:

- Provides real-time updates, including arrival/departure times, delays, cancellations, and platform changes
- Simplifies maintenance and minimizes downtime with EdgeBMC, enabling remote power on/off and comprehensive hardware monitoring
- Supports multiple displays, including 4K and 8K output, for high-resolution visualization
- Allows adjustable processor power limits to optimize performance for different application environments



Related Products



DS-054

AMD Ryzen™ Embedded 8000 Series

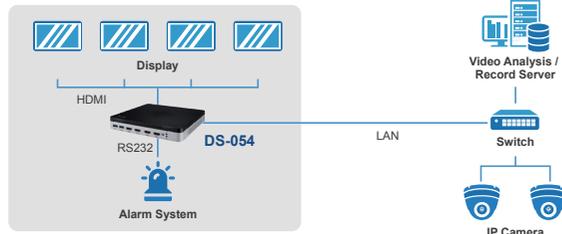


DS-084

AMD Ryzen™ Embedded 2000 Series

Windows Trellix Acronis AMD

High Performance High Resolution Display Solution with Remote Control & Monitoring



Information Boards



Key Aspects of Digital Signage in PIS:

- Real-time Information – Instantly update schedules, routes, and alerts.
- Enhanced Travel Experience – Clear guidance, reduced congestion, and better navigation.
- Centralized & Scalable – Remote management with modular, adaptable design.
- Versatility Across Revenue Streams – High-quality ads plus timetables and announcements.



Related Products



DS-202

Compact, efficient modular

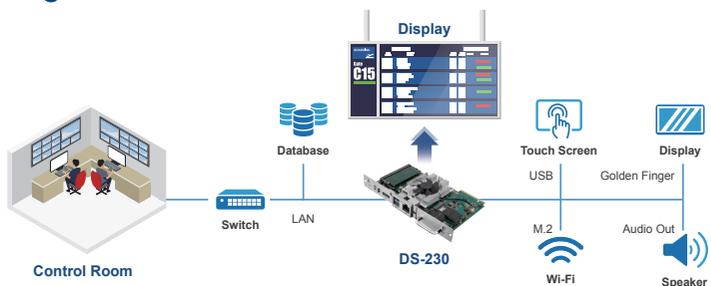


DS-230

High-performance, modular

intel. Windows Ubuntu chromeOS Trellix Acronis

Digital Menu Board Solution



DS for Hospitals



DS-085

- Versatile I/O Interfaces for Sensing & Control
- Ultra slim to install versatile env.
- Smart –fan and Silent 24/7 Operation



DS-086

- Multi Display for 4K/8K Resolution
- Remote Playback Control
- Auto power on/off

High Resolution





DS-084

- EDID/Slim Design
- Multi-Display/OOB HW support
- Cost Effective



DS-230

- Intel SDM -L design, -0~55 °C
- Triple independent displays output, rich I/Os
- Supports DeviceOn / SignageCMS



DS-011

- WoA & Android for integration
- Low Power Consumption
- Edge AI PC Box



Healthcare



Key Roles of Specimen Tracking Machine:

- Provides Continuous Specimen Tracking**
 Ensures 24/7 monitoring of specimens to maintain sample integrity and prevent loss or mix-ups during testing.
- Integrates with Laboratory Devices**
 Connects seamlessly with barcode scanners, label printers, and analyzers for efficient specimen identification and processing.
- Enables Remote System Management**
 Allows updates and troubleshooting anytime.



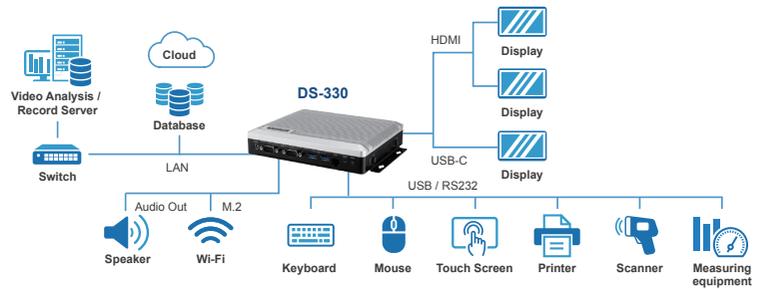
Related Products



DS-330
Compact Fanless System for Smart Kiosks



Efficient Specimen Flow, Accurate Tracking



Medical Signage with People Mask Detection



Key Roles of Medical Face (Mask) Recognition System:

- High Performance Edge AI PC Box**
 - GPU acceleration (NVIDIA GPU / AI accelerator)
 - Optimized for deep learning inference
 - Supports real-time face & mask recognition
 - Low latency processing with GMSL camera
- System Integration Capability**
 - Multi OS, Yocto/WoA/Android
 - Edge AI SDK is ready
- High Availability & Reliability**
 - 24/7 operation support
 - Redundant power supply



Related Products



DS-011
Edge AI PC powered by 12 TOPS AI computing



DS-015
Edge AI PC powered by up to 157 TOPS AI computing

Multiple OS with Ready Edge AI SDK



AD Boards



Key Aspects of Effective Digital Signage in Workspaces:

- Enhances communication with real-time, dynamic content.
- Displays announcements, company updates, and performance metrics.
- Facilitates wayfinding and meeting room bookings.
- Improves employee engagement and collaboration.
- Streamlines workflows and boosts productivity.
- Elevates visitor and employee experiences with on-demand information.



Related Products



DS-410

Compact, versatile digital signage solution



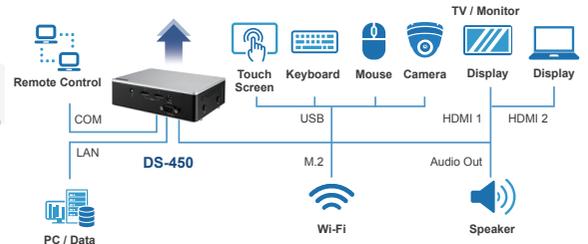
DS-450

High-performance signage with flexible connectivity

intel. Windows Ubuntu chromeOS Trellix Acronis



Digital Signage Solutions for Modern Workspaces



Security



Key Aspects of Effective AI-Powered Control Rooms:

- Predictive Analytics: Anticipates issues like traffic congestion or safety threats before escalation.
- Proactive Alerting: Prioritizes alerts by severity for faster responses.
- Informed Decisions: Provides real-time updates for quick action in critical scenarios.
- Enhanced Collaboration: Centralizes data to improve inter-department communication.



Related Products



DS-085

Compact AI-driven signage player

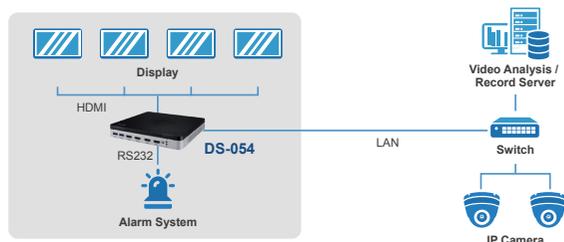


DS-086

High-performance control room processor

intel. Windows Trellix Acronis

Smart Control Room TV Wall Solutions



DS for Casinos



DS-084

- High value 4x4K signage player
- Ultra-slim, 24/7 reliable, Pro I/O
- Support out of Band and EDID



DS-085

- High Performance
- Reliable Connectivity & Power
- Serial ports for multi machines



DS-410

- Compact Design
- Easy to install
- Cost Effective





DS-011 ∨ DS-015

- Edge AI: DS-011 (QCS6490) / DS-015 (Orin)
- Multi-camera ready: GMSL/IP/USB
- Kiosk-grade: slim, dual 4K, rich I/O



Wall Mount



VESA Mount

DS-230

- Intel SDM -L design, -0~55 °C
- Triple independent displays output, rich I/Os
- Supports DeviceOn / SignageCMS



DS-086

- High Performance 8K or 4x4K
- Ultra-slim, 24/7 reliable, Pro I/O
- Support Edge AI and Interactive application



Retail & Self-Service Solutions



Key Roles of AI-Driven Signage :

- Real-Time Adaptability:**
 Uses advanced algorithms to analyze data like demographics, time, and location to deliver relevant content.
- Dynamic Content Scheduling:**
 Optimizes ad placement based on foot traffic and sales trends for maximum impact.
- Customer Insights:**
 Captures and processes behavior data to refine engagement strategies.



Related Products



DS-054

AMD New Gen AI Platform

DS-085

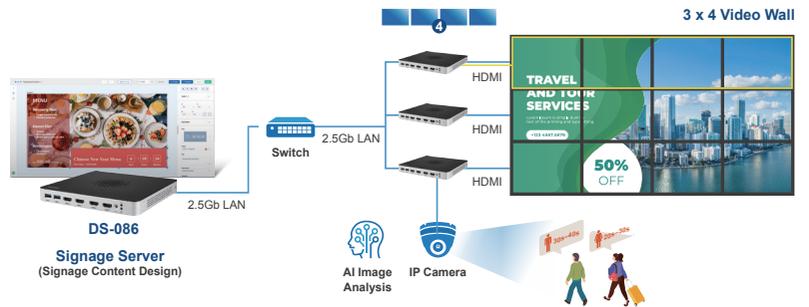
Compact solution for smaller-scale AI needs

DS-086

For dynamic retail AI applications

intel. Windows Trellix Acronis

AI-Driven Retail Transformation



Premium AI PC for Casinos & Entertainment



Key Roles of Gambling Systems:

- High Performance Edge AI PC Box**
 • High-performance AI computing with energy-efficient GPU acceleration, delivering up to 157 TOPs
- Ultra-Slim Design with Multiple Mounting Options**
 • Minimizes deployment space
 • Easy installation in casino kiosks
- Ready Inference Demo SDK**
 • Supports SW development kit



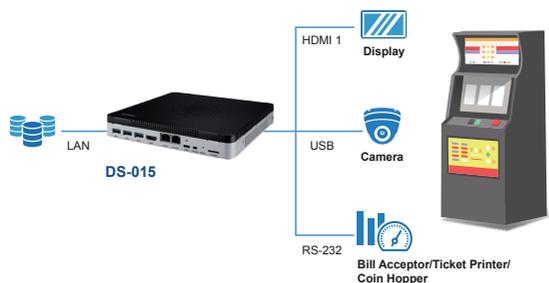
Related Products



DS-015

Edge AI PC

Ultra-stable 24/7 operation for casino and gaming environments



Lotteries



Key Roles of Lottery Signage:

- **Promotes Lottery Products**
Displays jackpot prizes, game instructions, and lucky draw details.
- **Attracts Customers**
Utilizes high-definition visuals and animations to grab attention.
- **Improves Information Clarity**
Simplifies complex messages for broader audience understanding.



Related Products



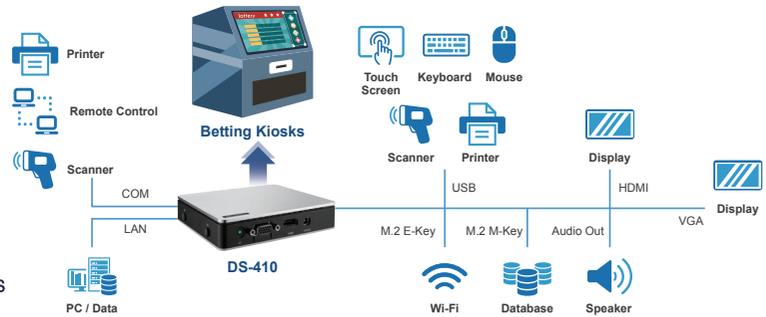
DS-410
Compact, versatile digital signage solution



DS-450
High-performance signage with flexible connectivity

intel | Windows | Ubuntu | chromeOS | Trellix | Acronis

Enhancing the Lottery Experience



Smart Vending Machine for Retail Solution



Key Roles of Smart Vending Machine Solution:

- **Real-Time AI Recommendations:** On-device NPU analyzes customer behavior to deliver personalized product suggestions.
- **Edge AI Foot Traffic Analytics:** Tracks foot traffic, dwell time, and hotspots to optimize store layout, staffing, and inventory.
- **Smart Interactive Signage:** GPU + NPU enable dynamic, personalized ads based on customer characteristics, boosting engagement.



Related Products



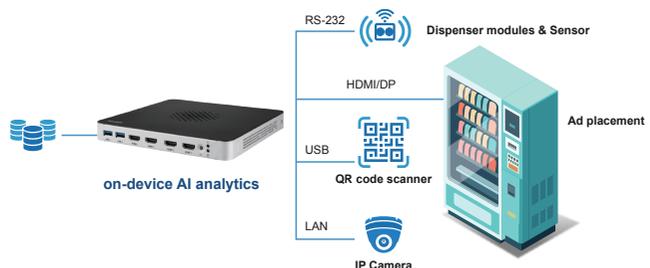
DS-087 (Upcoming)
Intel Panther Lake Core Ultra 5 & Core Ultra 7



DS-086
Intel® Core™ Ultra 5 & 7

intel | Windows | Trellix | Acronis | AMD

Ultra-Slim 180 TOPS AI System with Integrated GPU + NPU for Real-Time Vision AI in Edge Applications



DS Series Flexible Mounting Options

Advantech DS Series is engineered for fast, flexible installation across diverse signage environments through a comprehensive mounting kit ecosystem. With support for VESA, wall, pole, and rack mounting, integrators can standardize deployment while adapting to site-specific constraints, whether for smart retail kiosks, healthcare dashboards, smart city public displays, smart factory monitoring, restaurant signage, transportation information

All in One



VESA Mount/Smart Retail Kiosk

Standard



Wall Mount/i-Healthcare Dashboard
DS-0 & 3 & 4 series



VESA Mount/Smart Factory Dashboard
DS-410/DS-450

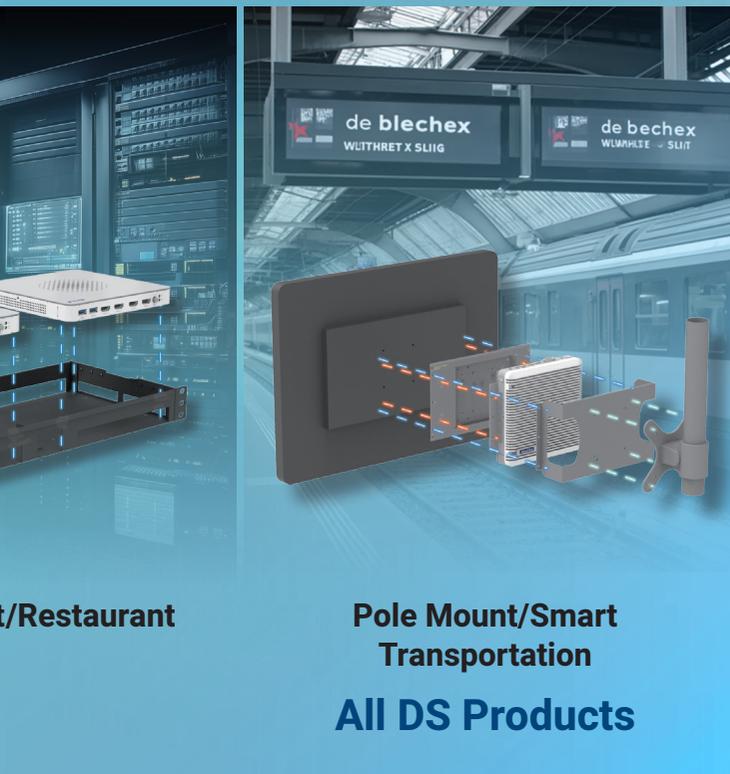


VESA Mount

systems, or kitchen display solutions. Optional all-in-one and standard mounting kits simplify mechanical integration and cabling, while mounting-kit-free configurations enable rapid, streamlined builds when minimal accessories are preferred. The result is greater installation flexibility, reduced on-site labor, and faster rollout—delivering lower total deployment cost without compromising reliability or serviceability.



VESA Mount/Smart City Public Display
All DS Products



Restaurant

Pole Mount/Smart Transportation
All DS Products



Mounting-Kit-Free

Kitchen Display Solution
DS-540

Sector-Focused Industrial Display Solutions, From Design to Deployment



Optical Excellence

- Sunlight-readable brightness
- Low-reflection optical bonding
- Proper AG/AR/AS treatments

Rugged Design

- IP65~IP67-rated front design
- Wide temp. range: -30~85°C
- IK08 impact protection
- Panel supports 24/7 operation



Immersive Design

- Curved C/J-type touch monitors
- Programmable LED lighting strips
- Color calibration

Complete & Lasting Support

- Custom design-in solution
- Full DTOS Service
- 3-year minimum support
- 2-year standard warranty



Product Selection Guide

		Ultra Slim Digital Signage Solutions			
					
Model Name		DS-082	DS-084	DS-054	DS-085
Cooling Type		Fan / Fanless	Fan	Fan	Fanless
System	Processor	AMD Ryzen™ V1000/R2000 Series	AMD Ryzen™ R2000 Series (R2314,R2314,R2514)	AMD RYZEN™ Embedded 8000 (8640U/8840U)	Intel® Tiger Lake, Celeron/i3/i5
	Graphics	AMD Radeon HD graphics	AMD Radeon HD graphics	AMD Radeon™ RDNA 3 graphics	Intel® Iris® Xe Graphics
	Memory	2 x SO-DIMM, DDR4 2600MHz, Max. 32GB	2 x SO-DIMM, DDR4 2600MHz, Max. 32GB	2 x SO-DIMM, DDR4 5600MHz, Max. 96GB	2 x SO-DIMM, DDR4 3200MHz, Max. 32GB
I/O Interface	Display Port	3/4 x HDMI 2.0	*3 x HDMI 2.1 TMDS 1 x HDMI 1.4b	1 x HDMI 2.1 (FRL, up to 8K) and 3 x HDMI 2.1 (TMDS, up to	4 x HDMI 2.0
	Max. Resolution	3840 x 2160 @ 60Hz	3840 x 2160 @ 60Hz (TMDS)		3840 x 2160 @ 60Hz
	Ethernet	1 x Realtek RTL8111H (1GbE)	*1 x Realtek RTL8111K 1 x Intel I210	1G I210 = 1G Nuvoton EdgeBMC EIO-300 2.5G I226 = 2.5G Nuvoton EdgeBMC EIO-300	2 x Realtek RTL8119I (1GbE)
	USB 3.2	2 x USB 3.2 Gen 1 (5Gbps)	2 x USB 3.2 Gen 1 (5Gbps)	1 x USB 3.2 Gen1	2 x USB 3.2 Gen 1 (5Gbps)
	USB 2.0	2 x USB 2.0	2 x USB 2.0	2 x USB 2.0	2 x USB 2.0
	USB C	-	-	1 x USB-C (support DP 5Vx3A)	-
	Serial Port	1x COM: RS-232 (TX/RX)	*1 x COM: RS-232 (TX/RX/CTS/RTS) option: 1 x COM RS-232 (TX/RX)	1x COM: RS-232 (TX/RX)	1x COM: RS-232 (TX/RX)
	Audio	Select one from SPDIF/Mic-in/Line out	Select one from SPDIF/Mic-in/Line out	3.5mm Audio Jack for jack sense (Line-in/out or Mic-in)	Select one from SPDIF/Mic-in/Line out
	IR Phone Jack	-	1		1
	Function Button	-	BOM option with EDID RSTBTN	1 x EDID_CLR button	Reserve for OEM
	Others	-	-	-	-
	Storage Interface	M.2 (M/B Key)	1 (SATA)	1 (SATA/NVME, Auto)	1 x M.2 2242 M Key PCIe4
2.5" SSD		-	-	-	-
Expansion Slot	M.2	*1 x M.2 M key 2242 (SATA) 1 x M.2 E Key 2230 for WIFI/BT	1 x M.2 M key 2242 (SATA/NVME auto)	2 x 2230 E Key WIFI/Hailo 8 1 x 2280 M Key PCIe3	1 x M.2 M key 2242 (SATA)
	Others	-	-	-	-
Advanced Features	HW EDID	-	DS-084GB-U2A1E	-	-
	HDMI CEC	HW reserved for OEM	HW reserved for OEM	HW reserved	HW reserved for OEM
	Others	-	Out-of-Band Management	Out-of-Band Management	Function BTN: Reserve for OEM
Power Supply	DC Input	19V DC-IN (ATX/AT mode)	12- 24V DC-IN	12- 24V DC-IN	19V DC-IN (ATX/AT mode)
Environmental	Operating Temperature	0 ~ 40 °C (with 0.7m/s air flow)	0 ~ 40 °C (with 0.7m/s air flow)	0 ~ 40 °C (with 0.7m/s air flow)	0 ~ 40°C (with 0.7m/s air flow)
	Certification	CE/FCC Class B, BSMI, UKCA UL, CB, BSMI, CCC	CE/FCC Class B, BSMI, UKCA UL, CB, BSMI, CCC	CE/FCC Class B, BSMI, UKCA UL, CB, BSMI, CCC	CE/FCC Class B, BSMI, UKCA UL, CB, BSMI, CCC
Operating System		Win10 IoT LTSC / Win 11 IoT LTSC	Win 11 IoT LTSC	Win 11 IoT LTSC	Win10 IoT LTSC / Win 11 IoT LTSC
Case	Dimensions (L x W x H)	180 x 190 x 19 mm	180 x 190 x 19 mm	180 x 177 x 29.9 mm	180 x 190 x 19 mm
Optional Accessories	Mounting Kit	Wall Mount / VESA	Wall Mount	Wall Mount / VESA	Wall Mount / VESA
	Others	-	Top cover protection kit		-

Ultra Slim Digital Signage Solutions			Compact DS Solutions	
DS-086	DS-011	DS-015	DS-410	DS-450
Fan	Fanless	Fan	Fanless	Fan / Fanless
Intel® Meteor Lake Ultra5 (U/H) (10 TOPS NPU)	Qualcomm octa-cores QCA6490 (12 TOPS NPU)	NVIDIA Jetson Orin (Nano_4G/Nano_8G/NX_8G/NX_16G)	Intel® Elkhart Lake, 4 Cores J6412, 2.0 Ghz	Intel® Elkhart Lake, 4 Cores J6412, 2.0 Ghz
Intel® Arc™ graphics (125/135H) Intel® Graphics (125/135U)	Qualcomm® Adreno™ 643L	Orin NX: 1024-core NVIDIA Ampere GPU; Orin Nano: 512-core (4GB) / 1024-core (8GB)	Intel UHD graphics	Intel UHD graphics
2 x SO-DIMM, DDR5 5600MHz, Max. 48GB	On Board LPDDR5 8533MHz, Max. 8GB	Jetson Orin Nano 4GB / 8GB LPDDR5 4267 MT/s on board Jetson Orin NX 8GB / 16GB LPDDR5 8533 MT/s on board	On Board LPDDR4 3733MHz, Max. 8GB	On Board LPDDR4 3733MHz, Max. 8GB
1 x HDMI 2.1 FRL/TMDS 3 x HDMI 2.1 TMDS	2 x HDMI 2.1 TMDS	1 x HDMI 1.4	1 x HDMI 2.0 1 x VGA	1 x HDMI 2.0 1 x HDMI 1.4
7680 x 4320 @ 60Hz (FRL) 3840 x 2160 @ 60Hz (TMDS)	3840 x 2160 @ 30Hz	Nano: 4K UHD (3840x2160) @ 30Hz NX: 4K UHD (3840x2160) @ 60Hz	3840 x 2160 @ 60Hz	3840 x 2160 @ 60Hz
2 x Intel i226V (2.5GbE) option vPro Intel i226LM	2 x Realtek RTL8211 (1GbE)	2 x 2 x Intel i226IT (2.5G)	2 x Realtek RTL8119I (1GbE)	2 x Realtek RTL8119I (1GbE)
2 x USB 3.2 Gen 1 (5Gbps)	2 x USB 3.2 Gen 1 (5Gbps)	3 x USB 3.2 x Gen1	2 x USB 3.2 Gen 1 (5Gbps)	2 x USB 3.2 Gen 1 (5Gbps)
2 x USB 2.0	-	-	-	4 x USB 2.0
-	1 x (Download-Mode)	1 x (Download-Mode)	-	-
1x COM: RS-232 (TX/RX)	1 x COM: RS-232 (TX/RX/CTS/RTS) 1 x COM: Debug Console (TX/RX)	1 x RS232 (2 wires), 1 x RS-232/422/485.	2x COM: RS-232 (TX/RX)	2x COM: RS-232 (TX/RX)
Select one from SPDIF/Mic-in/Line out	Headset Jack: Combo Jack Type	Select one from SPDIF/Mic-in/Line out	via HDMI	via HDMI
1	-	-	-	-
BOM option with EDID RSTBTN	-	-	-	-
-	2 x GMSL Conn: (Option)	2 x GMSL Conn: (Option)	-	-
1 (NVMe)	1 (NVMe), 1 (LTE)	M.2 M key 2280, M key 2242, E key 2230	1 (SATA)	1 (SATA)
-	-	-	-	-
1 x M.2 M key 2242 (NVME)	1 x M.2 B key 3042 (4G/LTE) 1 x M.2 E Key 2230 for (WiFi/BT) 1 x M.2 M Key 2280 for (NVME)	1x M.2 2230 E Key (BOM Option) 1x M.2 2242 M Key 1 x M.2 2280 M Key for NVME	1 x M.2 M key 2242 (SATA) for Storage 1 x M.2 E Key 2230 for WiFi/BT	1 x M.2 M key 2242 (SATA) for Storage 1 x M.2 E Key 2230 for WiFi/BT
-	-	-	-	-
DS-086GB-U2A1E	-	-	-	-
HW reserved for OEM	-	-	HW reserved	HW reserved
Fuction BTN: EDID Reset or EC GPIO	2 x GMSL Option	2 x GMSL Option	-	-
19V DC-IN (ATX/AT mode)	12- 24V DC-IN	12- 24V DC-IN	19V DC-IN (ATX/AT mode)	19V DC-IN (ATX/AT mode)
0 ~ 40°C (with 0.7m/s air flow)	0 ~ 40°C (with 0.7m/s air flow)	0 ~ 40°C (with 0.7m/s air flow)	0~40°C (with 0.7m/s air flow) 0~35°C (without air flow)	0 ~ 45 °C (with 0.7m/s air flow)
CE/FCC Class B, BSMI, UKCA	CE/FCC Class B, BSMI, UKCA	CE/FCC Class B, BSMI, UKCA	CE/FCC Class B, BSMI, UKCA, CE-RED	CE/FCC Class B, BSMI, UKCA
UL, CB, BSMI, CCC	UL, CB, BSMI, CCC	UL, CB, BSMI, CCC	UL, CB, BSMI	UL, CB, BSMI
Win10 IoT LTSC / Win 11 IoT LTSC	Linux Yocto	Linux Ubuntu 22.04	Win10 IoT LTSC / Win 11 IoT LTSC / Linux	Win10 IoT LTSC / Win 11 IoT LTSC / Linux
180 x 190 x 22 mm	180 x 190 x 23 mm	180 x 177 x 29.9mm	124 x 116 x 26 mm	160 x 115 x 44 mm
Wall Mount	Wall Mount	Wall Mount	Wall Mount / VESA / DIN Rail	Wall Mount
Top cover protection kit	Top cover protection kit	Top cover protection kit	Mesh cover protection kit	-

Product Selection Guide

		Modular Digital Signage Solutions		Multi-Display Digital Signage Solutions	Digital Out-of-Home (DOOH)	
						
Model Name		DS-202	DS-230	DS-651	DS-330	DS-380
Cooling Type		Fanless	Fan	Fanless	Fanless	Fanless
System	Processor	Intel® Elkhart Lake, Atom® x6413E 1.5GHz	Intel® Raptor Lake 13th Generation	AMD Ryzen R2514	Intel® Atom® X7000series, Processor N series, Core i3	*Intel® Meteor Lake Ultra5 (U/H) (11 TOPS NPU)
	Graphics	Intel UHD graphics	Intel® Iris® Xe	AMD Radeon HD graphics	Intel UHD graphics	*Intel® Arc™ graphics (125/135H) Intel® Graphics (125/135U)
	Memory	2 x SO-DIMM, DDR4 2666MHz, Max. 32GB	2 x SO-DIMM, DDR4 2666MHz, Max. 32GB	2 x SO-DIMM, DDR4 2666MHz, Max. 32GB	1 x SO-DIMM, DDR5 4800MHz, Max. 16GB	2 x SO-DIMM, DDR5 5600MHz, Max. 48GB
I/O Interface	Display Port	*HDMI 2.0 & DP1.2 from golden finger, mini-DP from I/O	HDMI 2.0 & DP1.4a from golden finger, DP1.4a from I/O	1 x HDMI 2.0 1 x HDMI 1.4	2 x HDMI 2.0 1 x USB-C	1 x HDMI 2.1 FRL/TMDS 3 x HDMI 2.1 TMDS
	Max. Resolution	3840 x 2160 @ 60Hz	3840 x 2160 @ 60Hz	3840 x 2160 @ 60Hz	3840 x 2160 @ 60Hz	7680 x 4320 @ 60Hz (FRL) 3840 x 2160 @ 60Hz (TMDS)
	Ethernet	1 x Realtek RTL8119I (1GbE)	*1 x Intel i226V (2.5GbE) option vPro Intel i226LM	2 x X550-AT2 (10GbE) 1 x RTL8111FP (1GbE)	2 x Intel i226IT (2.5G)	2 x Intel i226IT (2.5GbE)
	USB 3.2	2 x USB 3.2 Gen 1 (5Gbps)	2 x USB 3.2 Gen 1 (5Gbps)	2 x USB 3.2 Gen 2 (10Gbps)	4 x USB 3.2 Gen 1 (5Gbps)	2 x USB 3.2 Gen 1 (5Gbps)
	USB 2.0	-	-	4 x USB 2.0	-	2 x USB 2.0
	USB C	-	-	-	1 x USB-C, Support DP 1.4a + USB 3.2 Gen 1 (5Gbps)	-
	Serial Port	-	-	-	2 x COM: RS-232 (Powered)	1x COM: RS-232 (TX/RX)
	Audio	Mic in or Line out	-	Mic in or Line out	Mic in or Line out	Select one from SPDIF/Mic-in/Line out
	IR Phone Jack	-	-	-	-	1
	Function Button	-	-	-	-	BOM option with EDID RSTBTN
	Others	-	-	-	1 x RJ12 (Cash Drawer)	-
Storage Interface	M.2 (M/B Key)	1 (SATA)	1 (SATA/PCIex2)	1 (SATA)	1 (SATA/PCIex2)	1 (NVMe)
	2.5" SSD	-	-	-	-	-
Expansion Slot	M.2	1 x M.2 M Key 2242 (SATA) for Storage 1 x M.2 E Key 2230 x 1 for WiFi/BT	1 x 2242 M Key (SATA/PCIex2) for Storage 1 x M.2 E Key 2230 x 1 for WiFi/BT	1 x M.2 M Key 2242 (SATA) for Storage 1 x M.2 E Key 2230 x 1 for WiFi/BT	1 x 2242 M Key (SATA/PCIex2) for Storage 1 x M.2 E Key 2230 x 1 for WiFi/BT	*1 x M.2 M key 2242 (NVME)
	Others	-	-	2 x EDSFF module (Xillinx AI module)	-	-
Advanced Features	HW EDID	-	-	-	All part numbers are included.	*DS-3800F-U0A1E DS-3800F-U1A1E
	HDMI CEC	-	-	HW reserved	DS-3300F-U0A1E (SW CEC)	HW reserved for OEM
	Others	-	Intel vPro Certification	DASH	Out-of-Band Management	Fuction BTN: EDID Reset or EC GPIO
Power Supply	DC Input	12V DC-IN (± 5%, Via Golden Finger)	12V DC-IN (± 5%, Via Golden Finger)	19V DC-IN	12-24V DC-IN	19V DC-IN (ATX/AT mode)
Environmental	Operating Temperature	0 ~ 55 °C @ Natural Convection Chamber	0 ~ 55 °C (with 0.7m/s air flow)	0 ~ 45 °C (with 0.7m/s air flow)	-20~60°C (with 0.7m/s air flow)	-10 ~ 50°C (with 0.7m/s air flow)
	Certification	CE, FCC Class B CB, UL VCCI	CE, FCC Class B, CB, UKCA, RCM, VCCI	CE/FCC Class B, BSMI, UKCA UL, CB, BSMI	CE/FCC Class B, BSMI, UKCA, CE-RED UL, CB, BSMI	CE/FCC Class B, BSMI, UKCA UL, CB, BSMI, CCC
Operating System		Win10 IoT LTSC / Win 11 IoT LTSC / Linux	Win10 IoT LTSC / Win 11 IoT LTSC / Linux / Chrome OS Flex	Win10 IoT LTSC / Linux	Win10 IoT LTSC / Win 11 IoT LTSC / Linux (by project support)	Win10 IoT LTSC / Win 11 IoT LTSC/Linux (by project support)
Case	Dimensions (L x W x H)	175 x 100 x 20 mm	175 x 100 x 20 mm	312.0 x 208.4 x 50.6 mm	180 x 150 x 35 mm	180 x 177 x 38 mm
Optional Accessories	Mounting Kit	-	-	Wall Mount	Wall Mount /VESA/Pole Mount Bracket	Wall Mount /VESA/Pole Mount Bracket
	Others	SDM Docking	SDM Docking	-	-	-

Regional Service & Customization Centers

China	Kunshan 86-512-5777-5666	Taiwan	Taipei 886-2-2792-7818	Netherlands	Eindhoven 31-40-267-7000	Poland	Warsaw 00800-2426-8080	USA	Milpitas, CA 1-408-519-3898
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Worldwide Offices

Greater China

China	
Toll Free	800-810-0345
Beijing	86-10-6298-4346
Shanghai	86-21-3632-1616
Shenzhen	86-755-8212-4222
Chengdu	86-28-8545-0198
Hong Kong	852-2720-5118
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Toll Free	0800-777-111
Taipei & IoT Campus	886-2-2792-7818
Taichung	886-4-2372-5058
Kaohsiung	886-7-392-3600

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Toll Free	0800-500-1055
Tokyo	81-3-6802-1021
Osaka	81-6-6267-1887
Nagoya	81-0800-500-1055
Korea	
Toll Free	080-363-9494
Seoul	82-2-3663-9494
Singapore	
Singapore	65-6442-1000
Malaysia	
Kuala Lumpur	60-3-7725-4188
Penang	60-4-537-9188
Thailand	
Bangkok	66-02-2488306-9
Vietnam	
Hanoi	84-24-3399-1155
Indonesia	
Jakarta	62-21-751-1939
Australia	
Toll Free	1300-308-531
Melbourne	61-3-9797-0100
India	
Bangalore	91-80-2545-0206
Pune	91-94-2260-2349

Europe

Netherlands	
Eindhoven	31-40-267-7000
Breda	31-76-523-3100
Germany	
Toll Free	00800-2426-8080/81
Munich	49-89-12599-0
Düsseldorf	49-2103-97-855-0
France	
Paris	33-1-4119-4666
Italy	
Milan	39-02-9544-961
UK	
Newcastle	44-0-191-262-4844
London	44-0-870-493-1433
Spain	
Madrid	34-91-668-86-76
Sweden	
Stockholm	46-722-293423
Poland	
Warsaw	48-22-31-51-100
Russia	
Moscow	8-800-555-01-50
St. Petersburg	8-800-555-81-20
Czech Republic	
Ústí nad Orlicí	420-465-521-020
Ireland	
Galway	353-91-792444

Americas

North America	
Toll Free	1-888-576-9668
Boston	1-949-420-2531
Chicago	1-888-576-9668
Cincinnati	1-513-742-8895
Irvine	1-949-420-2500
Milpitas	1-408-519-3898
Ottawa	1-815-433-510
Brazil	
Toll Free	0800-770-5355
São Paulo	55-11-5592-5367
Mexico	
Toll Free	1-800-467-2415
Mexico City	52-55-6275-2727
Middle East and Africa	
Israel	072-2410527
Turkey	90-212-222-0422
Turkey-Bursa	90-224-413-3134

ADVANTECH

Enabling an Intelligent Planet

www.advantech.com

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